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EXAMINER	
ZHONG, CHAD	

ART UNIT	PAPER NUMBER
2152	10

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/784,074	Applicant(s) DOBES ET AL.	
	Examiner Chad Zhong	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-117* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-117* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

FINAL ACTION

1. This action is responsive to communications: Amendment, filed on 08/27/2004. This action has been made final.

2. Claims 1 – 117 are presented for examination. In amendment A, filed on 08/27/2004

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 (c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-18, 20-28, 33-45, 47-63, 65-69, 72-93, 95, 97-99, 102-117 are rejected under 35 U.S.C. 102(e) as being anticipated by Bahlmann, US 6,487,594.

5. As per claim 1, Bahlmann teaches a network operations support system for supporting multiple service providers, each having end-users connected to a common network, comprising:

a digital repository populated with entries including information about end-users of a first service provider of the multiple service providers and other information about end-users of a second service provider of the multiple service providers (Col. 2, lines 1-4, lines 10-24, lines 32-39);

a processor; and

a computer readable medium encoded with processor readable instructions that when executed by the processor implement (Col. 3, lines 5-25),

a common interface mechanism configured to provide a single user interface for the first service provider and the second service provider to access entries in the digital repository, the first

service provider having access to entries regarding the end-users of the first service provider and the second service provider having access to entries regarding the end-users of the second service provider (Col. 3, lines 5-25; Col. 4, lines 45-50; Col. 6, lines 20-30).

6. As per claim 2, Bahlmann teaches the system of claim 1, wherein:

the digital repository is further populated with entries including network management information (Col. 3, lines 5-15); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement (Col. 3, lines 5-25)

a network management mechanism configured to access and maintain entries in the digital repository regarding network management information (Col. 2, lines 1-25, lines 30-40; Col. 3, lines 5-25).

7. As per claim 3, Bahlmann teaches the system of claim 2, wherein the network management information includes network status monitoring information (Col. 3, lines 5-15).

8. As per claim 4, Bahlmann teaches the system of claim 1, wherein:

the digital repository is further populated with entries including network usage information (Col. 3, lines 5-15), and

entries including end-user provisioning information (Col. 3, lines 15-25); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an end-user management mechanism configured to access and maintain entries in the digital repository regarding at least one of network usage information and end-user provisioning information (Col. 3, lines 15-40; Col. 4, lines 19-23, lines 35-45).

9. As per claim 5, Bahlmann teaches the system of claim 4, wherein:

the network usage information includes at least one of end-user connectivity duration and end-user

connectivity time-of-day information (Col. 3, lines 5-25; Col. 2, lines 13-23, lines 32-39); and

the end-user provisioning information includes at least one of end-user equipment information, level of service information, and end-user service provider information (Col. 3, lines 5-25).

10. As per claim 6, Bahlmann teaches the system of claim 1, wherein the common interface mechanism is further configured to provide secure access to entries in the digital repository (Col. 4, lines 19-22).

11. As per claim 7, Bahlmann teaches the system of claim 6, wherein the common interface mechanism provides secure access by at least one of accepting traffic from a predetermined set of IP addresses, encryption using secure shell, encryption using secure hypertext transfer protocol, user authentication by username and password, and user authentication by a one-time password technology (Col. 4, lines 19-22, lines 30-33).

12. As per claim 8, Bahlmann teaches the system of claim 1, wherein the common interface mechanism comprises a single web portal (Col. 4, lines 36-44).

13. As per claim 9, Bahlmann teaches the system of claim 8, wherein the common interface mechanism further comprises automated interfaces implemented as at least one of an extensible markup language interface, a file transfer protocol interface, an rsync Internet protocol interface, and an electronic mail interface (Fig. 6).

14. As per claim 10, Bahlmann teaches the system of claim 1, wherein the digital repository comprises a database (Col. 2, lines 10-15).

15. As per claim 11, Bahlmann teaches the system of claim 2, wherein the common interface mechanism is further configured to provide access to the network management mechanism for network

management personnel (Col. 3, lines 5-25; Col. 4, lines 45-50; Col. 6, lines 43-58).

16. As per claim 12, Bahlmann teaches the system of claim 2, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement

an internal personnel access mechanism configured to provide internal personnel with direct access to the network management mechanism (Col. 3, lines 5-25; Col. 4, lines 45-50).

17. As per claim 13, Bahlmann teaches the system of claim 4, wherein the common interface mechanism is further configured to provide access to the end-user management mechanism for at least one of the multiple service providers and network management personnel (Col. 4, lines 45-50; Col. 3, lines 5-16).

18. As per claim 14, Bahlmann teaches the system of claim 4, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an internal personnel access mechanism configured to provide internal personnel with direct access to the end-user management mechanism (Col. 3, lines 5-25, lines 55-63; Col. 4, lines 35-45).

19. As per claim 15, Bahlmann teaches the system of claim 1, wherein the common network comprises a network dedicated to broadband data transport services (Col. 3, lines 30-36).

20. As per claim 16, Bahlmann teaches the system of claim 15, wherein the broadband data transport services comprise at least one of Internet access, packetized voice, voice over IP, and video on demand (Col. 3, lines 30-36).

21. As per claim 17, Bahlmann teaches the system of claim 1, wherein the common network comprises an open access network (Col. 4, lines 36-44).

22. As per claim 18, Bahlmann teaches the system of claim 1, wherein at least a portion of the common network comprises an Internet protocol network (Col. 3, lines 30-33).

23. As per claim 20, Bahlmann teaches the system of claim 1, wherein the at least one of the multiple service providers comprises an Internet service provider (Col. 3, lines 5-10).

24. As per claim 21, Bahlmann teaches the system of claim 1 wherein:

the digital repository is further populated with entries including service availability information (Col. 3, lines 5-25); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a service availability mechanism configured to access and maintain entries in the digital repository regarding service availability information (Col. 5, lines 38-53).

25. As per claim 22, Bahlmann teaches the system of claim 21, wherein the service availability information includes information regarding geographic availability of the common network (Col. 5, lines 38-53).

26. As per claim 23, Bahlmann teaches the system of claim 21, wherein the common interface mechanism is further configured to provide access to the service availability mechanism for at least one of the multiple service providers and network management personnel (Col. 5, lines 38-53; Col. 3, lines 5-25).

27. As per claim 24, Bahlmann teaches the system of claim 21, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an internal personnel access mechanism configured to provide internal personnel with direct

access to the service availability mechanism (Col. 3, lines 5-25, lines 45-47, lines 57-62).

28. As per claim 25, Bahlmann teaches the system of claim 1, wherein:

the digital repository is further populated with entries including network asset management information corresponding to assets of the common network (Col. 3, lines 5-15); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a network asset management mechanism configured to access and maintain entries in the digital repository regarding network asset management information (Col. 3, lines 5-15).

29. As per claim 26, Bahlmann teaches the system of claim 25, wherein the common interface mechanism is further configured to provide access to the network asset management mechanism for network management personnel (Col. 4, lines 35-45, lines 47-50).

30. As per claim 27, Bahlmann teaches the system of claim 25, wherein the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement an internal personnel access mechanism configured to provide internal personnel with direct access to the network asset management mechanism (Col. 5, lines 38-53, Col. 3, lines 5-25, lines 45-47, lines 57-62; Col. 6, lines 43-58).

31. As per claim 28, claim 28 is rejected for the same reasons as rejection to claim 5 above.

32. As per claim 33, Bahlmann teaches the system of claim 1, wherein:

the digital repository is further populated with entries including workforce management information (Col. 3, lines 5-25);

and

the computer readable medium is further encoded with processor readable instructions that when

executed by the processor implement a workforce management mechanism configured to access and maintain entries in the digital repository regarding workforce management information (Col. 3, lines 5-25, Col. 2, lines 1-5, lines 10-23).

33. As per claim 34, Bahlmann teaches The system of claim 33, wherein the common interface mechanism is further configured to provide access to the workforce management mechanism for at least one of the multiple service providers and network management personnel (Col. 3, lines 5-25; Col. 4, lines 35-50).

34. As per claim 35, claim 35 is rejected for the same reasons as rejection to claim 27 above.

35. As per claim 36, Bahlmann teaches the system of claim 33, wherein the workforce management information includes at least one of a workorder description indicator, a workorder status indicator, an assigned truck indicator, a confirmation number indicator, and an appointment time indicator (Col. 3, lines 5-25).

36. As per claim 37, Bahlmann teaches the system of claim 4, wherein the end-user management mechanism is further configured to provision new end-users (Col. 3, lines 3-25).

37. As per claim 38, Bahlmann teaches the system of claim 1, wherein:

the digital repository is further populated with entries including billing information corresponding to usage of the common network by end-users of at least one of the multiple service providers (Col. 3, lines 5-25; Col. 4, lines 20-30); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a billing mechanism configured to access and maintain entries in the digital repository regarding billing information and to generate bills for each of the multiple service providers based on usage of the common network by respective end-users (Col. 3, lines 5-25; Col. 4, lines

18-22).

38. As per claim 39, Bahlmann teaches the system of claim 38, wherein the common interface mechanism is further configured to provide access to the billing mechanism for at least one of the multiple service providers and network management personnel (Col. 4, lines 18-22; Col. 3, lines 5-25).

39. As per claim 40, claim 40 is rejected for the same reasons as rejection to claim 27 above.

40. As per claim 41, Bahlmann teaches the system of claim 38, wherein the billing information includes at least one of an end-user identification indicator, a service level purchased indicator, an end-user service provider indicator, a usage amount indicator, a detailed billing amount, a cumulative billing amount, and a billing period indicator (Col. 4, lines 20-30).

41. As per claim 42, Bahlmann teaches the system of claim 1, wherein:

the digital repository is further populated with entries including general ledger and accounts payable information corresponding to at least one of the multiple service providers (Col. 4, lines 20-30; Col. 2, lines 1-24); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a general ledger and accounts payable mechanism configured to access and maintain entries in the digital repository regarding general ledger and accounts payable information (Col. 4, lines 20-30, lines 35-45).

42. As per claims 43 and 44, claims 43 and 44 are rejected for the same reasons as rejection to claim 27 above.

43. As per claim 45, Bahlmann teaches the system of claim 1, wherein at least a portion of the common network comprises a Data Over Cable Service Interface Specification network (Col. 3, lines 30-

35).

44. As per claim 47, Bahlmann teaches the system of claim 1, wherein the digital repository is implemented as a single instance of a database (Col. 2, lines 10-24).

45. As per claim 48, Bahlmann teaches the system of claim 1, wherein the digital repository is implemented as at least two instances of a database, at least one of the at least two instances of the database serving as a master database (Fig 1).

46. As per claim 49, Bahlmann teaches the system of claim 1, wherein the common interface mechanism is further configured to be customizable by each of the multiple service providers (Col. 2, lines 13-24; Col. 3, lines 5-25).

47. As per claim 50, Bahlmann teaches the system of claim 49, wherein the common interface mechanism may be customized by at least one of using a sales script and adding a logo (Col. 2, lines 13-24; Col. 3, lines 5-25).

48. As per claim 51, Bahlmann teaches the system of claim 1, wherein the common interface mechanism is further configured such that each of the multiple service providers may restrict access based on at least one of a userid and a role (Col. 3, lines 5-25; Col. 4, lines 19-22).

49. As per claim 52, claim 52 is rejected for the same reasons as rejection to claim 27 above.

50. As per claim 53, claim 53 is rejected for the same reasons as rejection to claim 1 above.

51. As per claim 54, Bahlmann teaches the computer program product of claim 53, further comprising: a second computer code device configured to maintain network management information in the database, wherein the first computer code device is further configured to provide network

management personnel with access to the second computer code device to maintain entries of the database regarding network management information (Col. 5, lines 38-53; Col. 3, lines 5-25, lines 45-47, lines 57-62; Col. 6, lines 43-58).

52. As per claim 55, Bahlmann teaches the computer program product of claim 54, further comprising: a third computer code device configured to provide internal personnel with direct access to the second computer code device to maintain entries of the database regarding network management information (Col. 4, lines 35-44; Col. 2, lines 10-24).

53. As per claim 56, Bahlmann teaches the computer program product of claim 53, wherein the first computer code device is further configured to provide secure access to entries in the database (Col. 4, lines 18-22).

54. As per claim 57, Bahlmann teaches the computer program product of claim 53, further comprising:

a second computer code device configured to maintain at least one of network usage information and end-user provisioning information in the database, wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the second computer code device to maintain entries of the database regarding the at least one of network usage information and end-user provisioning information (Col. 3, lines 5-25).

55. As per claim 58, claim 58 is rejected for the same reasons as rejection to claim 27 above.

56. As per claim 59, claim 59 is rejected for the same reasons as rejection to claim 37 above.

57. As per claims 60-63, and 65, claims 60-63 and 65 are rejected for the same reasons as rejections

to claims 15-18 and 20 above respectively.

58. As per claim 66, Bahlmann teaches the computer program product of claim 53, further comprising:

a second computer code device configured to maintain service availability information in the database (Col. 3, lines 5-25; Col. 5, lines 38-53), wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the second computer code device to access entries of the database regarding service availability information (Col. 5, lines 38-53).

59. As per claim 67, claim 67 is rejected for the same reasons as rejection to claim 24 above.

60. As per claim 68, claim 68 is rejected for the same reasons as rejection to claim 23 above.

61. As per claim 69, claim 69 is rejected for the same reasons as rejection to claim 24 above.

62. As per claim 72, Bahlmann teaches the computer program product of claim 53, further comprising:

a second computer code device configured to maintain workforce management information in the database, wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the second computer code device to maintain entries of the database regarding workforce management information (Col. 3, lines 5-25; Col. 6, lines 43-58; Col. 4, lines 35-44).

63. As per claim 73, claim 73 is rejected for the same reasons as rejection to claim 27 above.

64. As per claim 74, Bahlmann teaches the computer program product of claim 53, further comprising:

a second computer code device configured to access billing information corresponding to usage of the common network by the end-users of the first service provider and the end-users of the second service provider in the database;

a third computer code device configured to maintain billing information corresponding to usage of the common network by the end-users of the first service provider and the end-users of the second service provider in the database; and

a fourth computer code device configured to generate bills for the first service provider and the second service provider based on usage of the common network by respective end-users, wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the second computer code device to access entries of the database regarding billing information, and to provide network management personnel with access to at least one of the third computer code device and the fourth computer code device to maintain entries of the database regarding billing information (Col. 4, lines 20-30; Col. 3, lines 5-25).

65. As per claim 75, claim 75 is rejected for the same reasons as rejection to claim 27 above.

66. As per claim 76, Bahlmann teaches the computer program product of claim 53, further comprising:

a second computer code device configured to maintain general ledger and accounts payable information in the database (Col. 4, lines 20-30),

the remainder of claim 76 are rejected for the same reasons as rejection to claim 24 above.

67. As per claim 77, claim 77 is rejected for the same reasons as rejection to claim 24 above.

68. As per claim 78, claim 78 is rejected for the same reasons as rejection to claim 45 above.

69. As per claims 80-82, claims 80-82 are rejected for the same reasons as rejection to claims 49-51 above.

70. As per claim 83, claim 83 is rejected for the same reasons as rejection to claim 1 above.

72. As per claim 84, Bahlamman teaches the method of claim 83, further comprising the steps of:

monitoring a status of the common network;

storing network management information in the database corresponding to the status of the common network determined in the monitoring step; and

accessing the network management information in the database via the single user interface by network management personnel (Col. 3, lines 5-25; Col. 2, lines 10-24; Col. 6, lines 43-58).

73. As per claim 85, Bahalmann teaches the method of claim 83, further comprising the steps of:

gathering first end-user provisioning information from the first end-user;

storing the first end-user provisioning information in the database;

associating the first end-user provisioning information with the first end-user in the database;

monitoring a usage of the common network by the first end-user;

storing first end-user network usage information in the database corresponding to the usage of the common network by the first end-user;

associating the first end-user network usage information with the first end-user in the database;

gathering second end-user provisioning information from the second end-user;

storing the second end-user provisioning information in the database;

associating the second end-user provisioning information with the second end-user in the database;

monitoring a usage of the common network by the second end-user;

storing second end-user network usage information in the database corresponding to the usage of the common network by the second end-user; and

associating the second end-user network usage information with the second end-user in the database (Col. 3, lines 5-25).

74. As per claims 86-93 and 95, claim 86-93, and 95 is rejected for the same reasons as rejection to claims 6-9, 15-18, and 45 above.

75. As per claim 98, Bahlmann teaches the method of claim 83, further comprising the steps of:

gathering service availability information corresponding to a geographic availability of the common network;

storing the service availability information in the database;

requesting connectivity to the common network by a third end-user to one of the first service provider and the second service provider;

querying the service availability information in the database via the single user interface by the one of the first service provider and the second service provider to determine an availability for the third end-user; and

indicating to the third end-user that the common network is one of available and not available based on a result of the querying step (Col. 3, lines 5-25; Col. 5, lines 38-53).

76. As per claim 99, Bahlmann teaches the method of claim 83, further comprising the steps of:

storing network asset management information in the database corresponding to components of the common network (Col. 3, lines 5-25), remainder of claim 99 is rejected for the same reasons as rejection to claim 24 above.

77. As per claims 102-104, claims 102-104 are rejected for the same reasons as rejections to claims

33, 38 and 39 above respectively.

78. As per claim 105, claim 105 is rejected for the same reasons as rejections to combination of claims 42 and 43 above respectively.

79. As per claim 106, claim 106 is rejected for the same reasons as rejections to claim 1 above.

80. As per claim 107, Bahlmann teaches the system of claim 1 wherein:

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement

a data logging mechanism configured to maintain a log of entries regarding end-user identification information (Col. 3, lines 5-25; Col. 4, lines 18-22).

81. As per claim 108, Bahlmann teaches the system of claim 107, wherein the end-user identification information includes at least one of an end-user device MAC address, a DHCP IP address granted to an end-user device, and end-user service account information (Col. 6, lines 4-5).

82. As per claim 109, claim 109 is rejected for the same reasons as rejections to claim 23 above.

83. As per claim 110, Bahlmann teaches the system of claim 109, wherein the common interface mechanism is further configured to provide a single user interface for the first service provider and the second service provider to access the log of entries maintained by the data logging mechanism, the first service provider having access to entries regarding end-users of the first service provider and the second service provider having access to entries regarding end-users of the second service provider (Col. 3, lines 5-25).

84. As per claim 111, claim 111 is rejected for the same reasons as rejections to claim 9 above.

85. As per claim 112, claim 112 is rejected for the same reasons as rejections to combination of claims 1 and 24 above.

86. As per claim 113, Bahlmann teaches the computer program product of claim 53, further comprising: a second computer code device configured to maintain a log of entries regarding end-user identification information (Col. 3, lines 5-25; Col. 4, lines 18-22).

87. As per claim 114, claim 114 is rejected for the same reasons as rejection to claim 108 above.

88. As per claim 115, claim 115 is rejected for the same reasons as rejections to combination of claims 1 and 24 above.

89. As per claim 116, Bahlmann teaches The computer program product of claim 53 wherein at least a portion of the computer program code mechanism is configured to be invoked through an application program interface (Col. 6, line 32).

90. As per claim 117, Bahlmann teaches the computer program product of claim 53, further comprising: a second computer code device configured to perform at least one of data warehousing and data mining of information in the database (Col. 2, lines 1-24).

Claim Rejections - 35 USC § 103

91. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

92. Claims 19, 46, 64, 94 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bahlaman, US 6,487,594, in view of 'Official Notice' in the example of Sistanizadeh et al. (hereinafter Sistanizadeh), US 6,101,182.

93. As per claim 19, Bahlmann does not teach hybrid fiber optic and coaxial network. However, "Official Notice" is taken that the concept and advantages of providing for a hybrid fiber co-axial network for transportation purposes is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include a portion of common network is a hybrid network with Bahlmann because it would provide for faster and greater range of transportation. As an illustrative example, referring to Sistanizdeh, Col. 3, lines 15-40. Sistanizdeh teaches the notion of hybrid co-axial network for improvement of speed.

94. As per claim 46, Bahlmann does not teach the system of claim 1, wherein at least a portion of the common network comprises a European Data Over Cable Service Interface Specification. However, "Official Notice" is taken that the concept and advantages of providing for a European Data Over Cable Service Interface Specification network transportation purposes in another country is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include European Data Over Cable Service Interface Specification network because it would provide for other modes of operation in other countries/territories.

95. As per claim 64, claim 64 is rejected for the same reasons as rejection to claim 19 above.

96. As per claim 94, claim 94 is rejected for the same reasons as rejection to claim 19 above.

97. As per claim 96, claim 96 is rejected for the same reasons as rejection to claim 46 above.

98. Claims 29-32, 70-71, 100-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahlaman, US 6,487,594, in view of Gogger et al. (hereinafter Gogger), US 2002/0087383,

99. As per claim 29, Bahlmann does not explicitly teach the system of claim 1, wherein:

the digital repository is further populated with entries including trouble ticket status information; and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a trouble ticketing mechanism configured to access and maintain entries in the digital repository regarding trouble ticket information.

100. Cogger teaches:

the digital repository is further populated with entries including trouble ticket status information (pg 2, [0018]); and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a trouble ticketing mechanism configured to access and maintain entries in the digital repository regarding trouble ticket information (pg 2, [0018]; pg 1, [0015]).

101. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Bahlmann and Cogger because they both dealing with updating and maintaining user records in a centralized database. Furthermore, the teaching of Cogger to include

the digital repository is further populated with entries including trouble ticket status information; and

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement a trouble ticketing mechanism configured to access and maintain entries in the digital repository regarding trouble ticket information would improve the error checking capabilities for Bahlmann's system by allowing users/ISPs to enter and keeping track of trouble tickets.

102. As per claim 30, Bahlmann does not teach the system of claim 29, wherein the common interface mechanism is further configured to provide access to the trouble ticketing mechanism for at least one of the multiple service providers and network management personnel.

103. Cogger teaches the system of claim 29, wherein the common interface mechanism is further configured to provide access to the trouble ticketing mechanism for at least one of the multiple service providers and network management personnel (pg 2, [0018], [0022], [0023]).

104. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Bahlmann and Cogger because they both dealing with updating and maintaining user records in a centralized database. Furthermore, the teaching of Cogger to include

wherein the common interface mechanism is further configured to provide access to the trouble ticketing mechanism for at least one of the multiple service providers and network management personnel would improve the error checking capabilities for Bahlmann's system by allowing users/ISPs to enter and keeping track of trouble tickets.

105. As per claim 31, claim 31 is rejected for the same reasons as rejection to claim 27 above.

106. As per claim 32, Bahlmann teaches the system of claim 29, wherein the trouble ticket status information includes at least one of a trouble ticket status indicator, a problem indicator, an impacted end-user indicator, and a service provider indicator (Col. 6, lines 15-25).

107. As per claim 70, Bahlmann does not teach the computer program product of claim 53, further comprising:

a second computer code device configured to maintain trouble ticket status information in the database, wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the second computer code device to maintain entries of the database regarding trouble ticket status information.

108. Cogger teaches the computer program product of claim 53, further comprising:

a second computer code device configured to maintain trouble ticket status information in the database, wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the second computer code device to maintain entries of the database regarding trouble ticket status information (pg 2, [0018]-[0019], [0015]).

109. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Bahlmann and Cogger because they both dealing with updating and maintaining user records in a centralized database. Furthermore, the teaching of Cogger to include

a second computer code device configured to maintain trouble ticket status information in the database, wherein

the first computer code device is further configured to provide at least one of the multiple service providers and network management personnel with access to the second computer code device to maintain entries of the database regarding trouble ticket status information would improve the error checking capabilities for Bahlmann's system by allowing users/ISPs to enter and keeping track of trouble tickets.

110. As per claim 71, Bahlmann does not teach the computer program product of claim 70, further comprising:

a third computer code device configured to provide internal personnel with direct access to the second computer code device to maintain entries of the database regarding trouble ticket status information.

111. Cogger teaches the computer program product of claim 70, further comprising:

a third computer code device configured to provide internal personnel with direct access to the second computer code device to maintain entries of the database regarding trouble ticket status information (pg 2,

[0022], [0023], [0018]).

112. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Bahlmann and Cogger because they both dealing with updating and maintaining user records in a centralized database. Furthermore, the teaching of Cogger to include

a third computer code device configured to provide internal personnel with direct access to the second computer code device to maintain entries of the database regarding trouble ticket status information would improve the error checking capabilities for Bahlmann's system by allowing users/ISPs to enter and keeping track of trouble tickets.

113. As per claim 100, Bahlmann does not teach the method of claim 83, further comprising the steps of:

opening a first trouble ticket by the first service provider via the single user interface;

storing a first trouble ticket entry in the database corresponding to the first trouble ticket;

associating the first trouble ticked entry with the first service provider in the database;

opening a second trouble ticket by the second service provider via the single user interface;

storing a second trouble ticket entry in the database corresponding to the second trouble ticket;

associating the second trouble ticket entry with the second service provider in the database;

querying the database for at least one of the first trouble ticket entry and the second trouble ticket entry by network management personnel; updating a status of the at least one of the first trouble ticket entry and the second trouble ticket entry by network personnel; and

storing the at least one of the first trouble ticket entry and the second trouble ticket entry in the database with the status as updated in the updating step.

114. Cogger teaches

opening a first trouble ticket by the first service provider via the single user interface;

storing a first trouble ticket entry in the database corresponding to the first trouble ticket;

associating the first trouble ticked entry with the first service provider in the database;

opening a second trouble ticket by the second service provider via the single user interface;

storing a second trouble ticket entry in the database corresponding to the second trouble ticket;

associating the second trouble ticket entry with the second service provider in the database;

querying the database for at least one of the first trouble ticket entry and the second trouble ticket entry by network management personnel; updating a status of the at least one of the first trouble ticket entry and the second trouble ticket entry by network personnel; and

storing the at least one of the first trouble ticket entry and the second trouble ticket entry in the database with the status as updated in the updating step (pg 2, [0018]-[0020], [0022]-[0023]).

115. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Bahlmann and Cogger because they both dealing with updating and maintaining user records in a centralized database. Furthermore, the teaching of Cogger to include

opening a first trouble ticket by the first service provider via the single user interface;

storing a first trouble ticket entry in the database corresponding to the first trouble ticket;

associating the first trouble ticked entry with the first service provider in the database;

opening a second trouble ticket by the second service provider via the single user interface;

storing a second trouble ticket entry in the database corresponding to the second trouble ticket;

associating the second trouble ticket entry with the second service provider in the database;

querying the database for at least one of the first trouble ticket entry and the second trouble ticket entry by network management personnel; updating a status of the at least one of the first trouble ticket entry and the second trouble ticket entry by network personnel; and

storing the at least one of the first trouble ticket entry and the second trouble ticket entry in the

database with the status as updated in the updating step

would improve the error checking capabilities for Bahlmann's system by allowing users/ISPs to enter and keeping track of trouble tickets.

116. As per claim 101, Bahlmann does not teach the method of claim 100, further comprising the step of:

associating at least one of the first trouble ticket and the second trouble ticket with an end-user in the database indicating a particular end-user having a problem.

117. Cogger teaches

associating at least one of the first trouble ticket and the second trouble ticket with an end-user in the database indicating a particular end-user having a problem (pg 2, [0018]).

118. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Bahlmann and Cogger because they both dealing with updating and maintaining user records in a centralized database. Furthermore, the teaching of Cogger to include

associating at least one of the first trouble ticket and the second trouble ticket with an end-user in the database indicating a particular end-user having a problem

would improve the error checking capabilities for Bahlmann's system by allowing users/ISPs to enter and keeping track of trouble tickets.

Conclusion

119. Applicant's remarks filed 8/27/04 have been considered but are found not persuasive.

120. In the remark, the Applicant argued in substance that Bahlmann does not teach providing multiple data service providers a high-speed network to expand their customer base, Bahlmann is directed to a

policy management method and system for use by a single internet service provider (hereinafter ISPs). In response to Applicant's amendment, Bahlmann does teach the above section.
Referring to Col. 3, lines 5-15, lines 55-63; Col. 5, lines 23-29, Bahlmann explicitly teaches the notion of multiple ISPs connecting to centralized location as shown in figure 4. Applicant believes Bahlmann is directed towards a single service provider, this assertion is based upon Fig 5 among other sections, wherein Bahlmann shows only a *sample* of one Service provider (emphasis added), the remaining ISPs certainly have the capability to connect to said central service. Thus Bahlmann teaches the notion of plurality/multiple service providers connecting to a centralized location.

121. In the remark, Applicant argued in substance that Bahlmann in view of Official Notice have no references cited to support the assertions. The Examiner have incorporated several references for Applicant's reference, specifically, for hybrid fiber-Coaxial networks, refer to Sistanizadeh et al. US 6,101,182 and sections cited contained in the final action above.

122. "hybrid fiber co-axial network for transportation purposes," "providing a European Data Over Cable Service Interface Specification network sic, for transportation purposes" are all intended use thus they will not give any patentable weight.

THIS ACTION IS MADE FINAL. Applicant is reined of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

1.136(a) will be calculated from the mailing date of the advisory action. In no event, however will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "System method and computer program product for supporting multiple service providers with a trouble ticket capability".

i.	US 6101182	Sistanizadeh et al.
ii.	US 6636502	Lager et al.
iii.	US 6662233	Skarpness et al.
iv.	US 6496575	Vasell et al.
v.	US 6430175	Jennings et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (703) 305-0718.. The examiner can normally be reached on M-F 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 703-305-8498. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CZ
September 3, 2004

Dung C. Dinh
Primary Examiner